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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,201	03/10/2004	Andrew McPherson Downie	85170-4599	6184
28765	7590	08/12/2005	EXAMINER	
WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006			GAY, JENNIFER HAWKINS	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,201	<b>Applicant(s)</b> DOWNIE ET AL.	
	<b>Examiner</b> Jennifer H. Gay	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-40 and 42-60 is/are rejected.
- 7) ☒ Claim(s) 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/17/05</u> . | 6) <input type="checkbox"/> Other: _____  |

*HL*

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because reference character “28” in Figure 1B is not indicating “a pin” as defined in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 31-36, 39, 40, and 48-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Makohl (US 4,485,880).

*Regarding claims 31, 32:* Makohl discloses a downhole tool for used with a downhole tool assembly. The tool includes the following features:

- A first body 1 and a second body 7 that are mounted for relative rotation.

- A joint part adapted to form a selectively releasable joint between the second body and a part of the assembly couplable to the second body (not shown; the examiner notes that the second body is connected conventionally to a drill bit 3:8-10).
- A locking means **13** for locking the first and second bodies relative to one another against relative rotation. The locking of the bodies relative to one another facilitates a release force through the first body to the joint to release the joint and thus separate the tool from the part of the assembly. (3:55-68; though the release is not specifically recited, it is stated that the drill pipe is rotated in the reverses direction which would inherently disconnect the stuck drill bit).

*Regarding claims 33, 36, 59:* The joint is configured to release at a force that is less than the force applied to make up the joint.

*Regarding claim 34:* The tool assembly includes a downhole drilling assembly (not shown) and the tool includes a drilling motor **2, 3** to drive a drill bit of the assembly.

*Regarding claim 35:* Makohl discloses a drilling assembly that includes the following features:

- A drill bit (not shown).
- A downhole drilling motor that has a body **1** for coupling the tubing of the assembly and a rotatable drive shaft **7** for coupling to the drill bit.
- A selectively releasable joint (not shown) located between the motor and the drill bit.
- A locking means **13** for locking the drive shaft to the motor body. The locking of the bodies relative to one another facilitates a release force through the first body to the joint to release the joint and thus separate the tool from the part of the assembly. (3:55-68; though the release is not specifically recited, it is stated that the drill pipe is rotated in the reverses direction which would inherently disconnect the stuck drill bit).

Art Unit: 3672

*Regarding claims 39, 56:* The joint is located between the drive shaft and the drill bit to allow separation of it from the remainder of the assembly.

*Regarding claims 40, 48:* The joint is a conventional joint thus is a cylindrical, threaded, pin and box connection.

*Regarding claim 49:* The locking means includes locking members that engage the motor to lock the shaft to the body of the motor.

*Regarding claims 50-52, 57, 58:* The locking members are placed in the string of the assembly at the surface to transport to a chamber 14 in the within the motor. The locking means are locking balls.

*Regarding claims 53, 54:* The motor can be a fluid drive turbine or a positive displacement motor.

*Regarding claim 55:* Makohl discloses a method for selectively releasing a drill bit using the above tool. The method involves the following steps:

- Providing the assembly.
- Activating the locking means.
- Applying a rotational release force to the tubing of the assembly and the motor body to release the joint and separate the motor from the bit.
- Recovering the remainder of the assembly to the surface.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 37, 38, 42-47, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makohl.

*Regarding claims 37, 38, 60:* Though Makohl does not disclose how much less torque is required to release the joint then is to make it up, It would have been considered

obvious to one of ordinary skill in the art, at the time the invention was made, to have formed the joint of Makohl so that the release torque was lower than 70%, specifically 30-50%, of the torque required to make up the joint, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

*Regarding claim 42-47:* Though Makohl does not disclose the motor shaft having a male pin and the drill bit having a female box, however, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have formed the assemblies of Makohl with the appropriate box/pin relationship as a box to a pin would have unthreaded the same as a pin to a box and designing the assembly with either relationship would have been within the ability of one of ordinary skill in the art since applicant has not disclosed that particular relationship claims solves any stated problem or is for any particular purpose and it appears that the invention would equally well with any box/pin relationship.

### ***Allowable Subject Matter***

6. The indicated allowability of claims 50-52, 57, and 58 (previously claims 20-22, 27, and 28) is withdrawn in view of the newly discovered reference(s) to Makohl. Rejections based on the newly cited reference(s) are given above.

7. Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

8. In view of applicant's amendment, the original objections to the drawings as well as the objections to the specification and claims 1 and 2 have been withdrawn.

9. Applicant's arguments with respect to claims 31-60 have been considered but are moot in view of the new ground(s) of rejection.

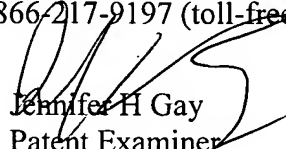
Art Unit: 3672

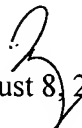
**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Patent Examiner  
Art Unit 3672

JHG   
August 8, 2005